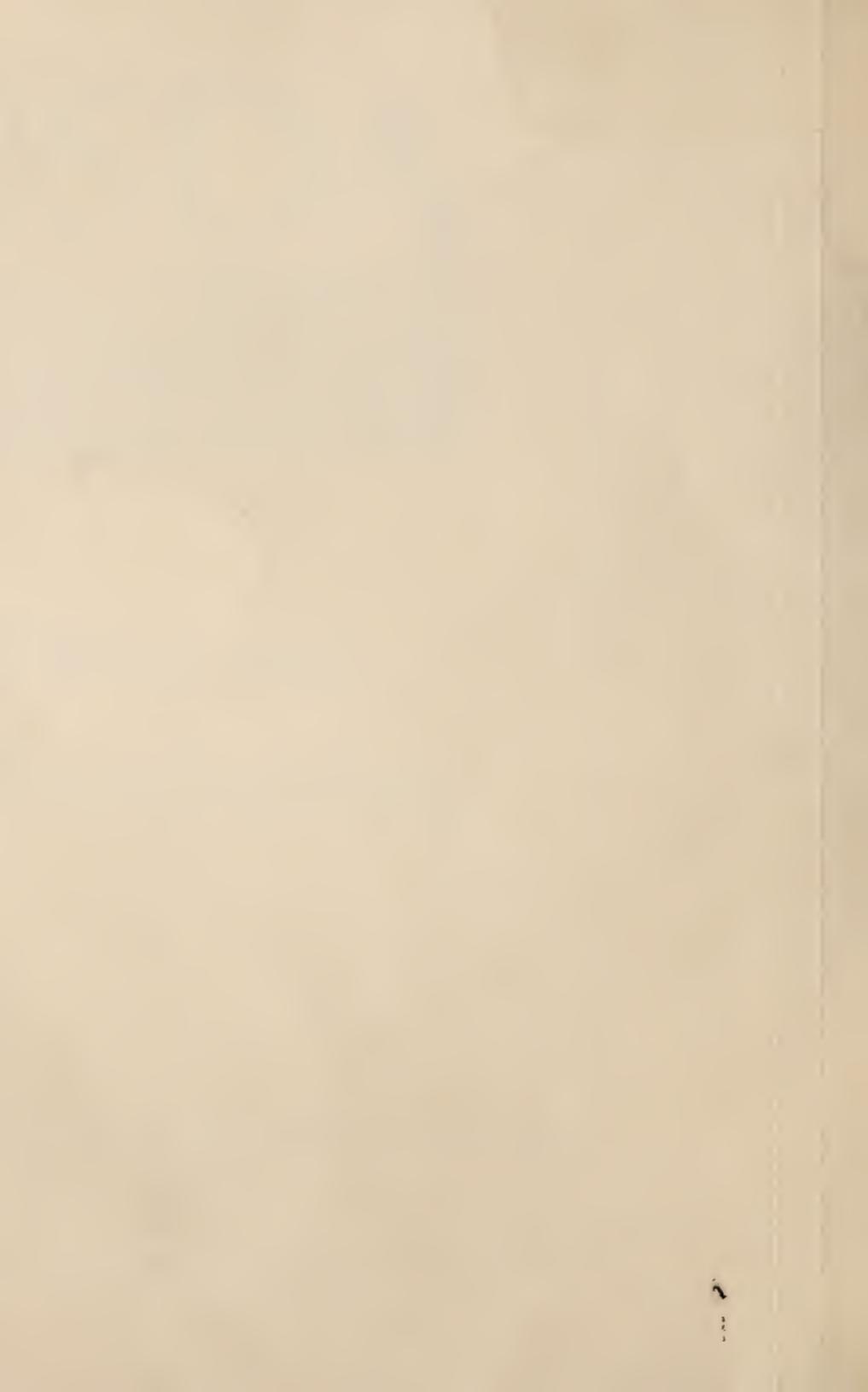


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PULPWOOD PRODUCTION

in the Northeast 1970



PSW FOREST AND RANGE
EXPERIMENT STATION

DEC 22 1971

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by James T. Bones
and David R. Dickson

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NORTHEASTERN FOREST EXPERIMENT STATION, UPPER DARBY, PA.
FOREST SERVICE, U.S. DEPARTMENT OF AGRICULTURE
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BACKGROUND

THIS ANNUAL REPORT is based on a canvass of all pulpmills in the Northeast that use wood—either roundwood or plant residues—as a basic raw material for a variety of products. Mills that use pulpwood as a raw material in producing insulation board and hardboard were also included in the canvass.

The statistics for production from roundwood reported in this bulletin are based upon mill receipts, which are subject to fluctuations caused by uneven wood-inventory buildups or liquidations from year to year. The plant residues are received at the pulpmill mostly in chip form; however, some coarse residues are being chipped at the mill site. Origins of mill receipts of pulpwood from roundwood are reported by county where cut. However, pulpwood from plant residues can be traced only to the State where it was produced; some of the logs from which the residues came were probably cut in States other than the one in which they were processed.

1970 in Retrospect

The tradeoff has begun. During 1970, International Paper Company closed its 88-year-old pulpmill at Ticonderoga, N. Y., and replaced it with a \$76 million mill complex. Westvaco closed its Williamsburg, Pa., mill and is phasing out operations at Mechanicville, N. Y., and Tyrone, Pa. But the Company's new highly automated installation at Wickliffe, Ky., will offset the loss in pulping capacity.

The pulp industry seems to be attacking its major problems—pollution and raw material availability—from three directions. Those companies that have become deeply involved in the battle to curb pollution now realize that one means of fighting water pollution is to develop techniques for obtaining higher pulp yields. The benefits are twofold—fewer pollutants to handle as residue of the pulping process and more product per unit of raw material.

Other companies acknowledge that their primary product—paper—becomes a source of pollution after it is used, since it is disposable. These companies are moving rapidly into the business of recycling waste. Twenty percent of the paper produced annually in the United States today is from recycled waste paper, in contrast to 35 percent in Europe. Current industry recycling ranges from de-inking and recycling newsprint to pilot plants that process garbage, transforming the recovered fibrous stock back into pulp.

A third group of companies are investigating the possibilities of making pulp from non-wood fibers or chemicals. Producing pulp by using raw material from an annually planted and harvested crop has great appeal. In theory, this practice would result in decreased demand for pulpwood and would allow more young trees time to mature and develop into trees of sawlog and veneer-log size.

Crown Zellerbach has developed a process for making synthetic woodpulp from ethylene gas. Although the process cannot yet compete in cost with manufacturing pulp from virgin wood fibers in the United States, it may soon be tested during a joint venture in timber-starved Japan.

After 7 years of collecting pulpwood production statistics in the Northeast, Neal Kingsley has used these statistics as a base for projecting future pulpwood requirements. If you have not yet received your copy of USDA Forest Service Resource Bulletin NE-23, "Pulpwood in the Northeast: Past, Present, and Future," send for one.

Pulpwood Production Climbs

Pulpwood production in the Northeast climbed to record levels in 1970, increasing nearly 10 percent above the 6,068,400 cords reported in 1969. This new record of 6,649,500 cords was attained in response to increases in the pulping capacity of existing mills, rather than new mill openings. Most of the increases from new mills were offset by closing older mills. Increased production of hardwood chips from plant residues in the Station's 14-State territory

(Connecticut, Delaware, Kentucky, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, and West Virginia) also contributed to the increase.

Roundwood production from softwood trees recovered much of the ground it lost in the past 2 years, but softwood chip production from plant residues turned down after recovering last year (figure 1). Hardwood pulpwood production from both roundwood and plant residues continued to climb. Hardwoods accounted for nearly 51 percent of the 1970 total.

Receipts of pulpwood at Northeastern woodpulp mills totaled 7,065,400 cords in 1970. Softwood receipts exceeded

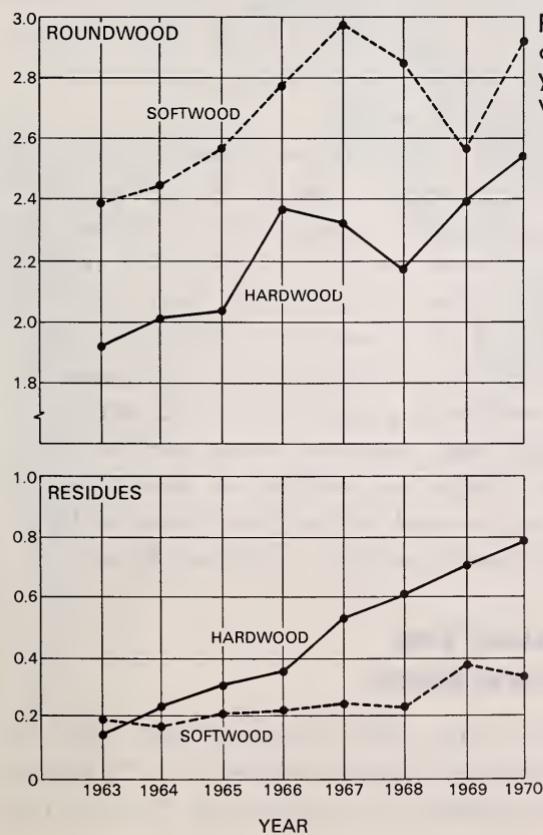


Figure 1.—Pulpwood production for all States, by years and sources of wood.

those of hardwoods by 96,000 cords. Total receipts exceeded total production by 415,900 cords (table 2). Five of the 14 States (Connecticut, Delaware, Massachusetts, Vermont, and West Virginia) produced more wood than they received. Delaware and West Virginia had no operating woodpulp mills; Vermont, Massachusetts, and Connecticut each had one.

Production and receipts of hardwood pulpwood continue to be more or less in balance, while the deficit of softwood pulpwood is made up by Canadian pulpwood shipments into the Northeastern States.

Production from Roundwood Increases

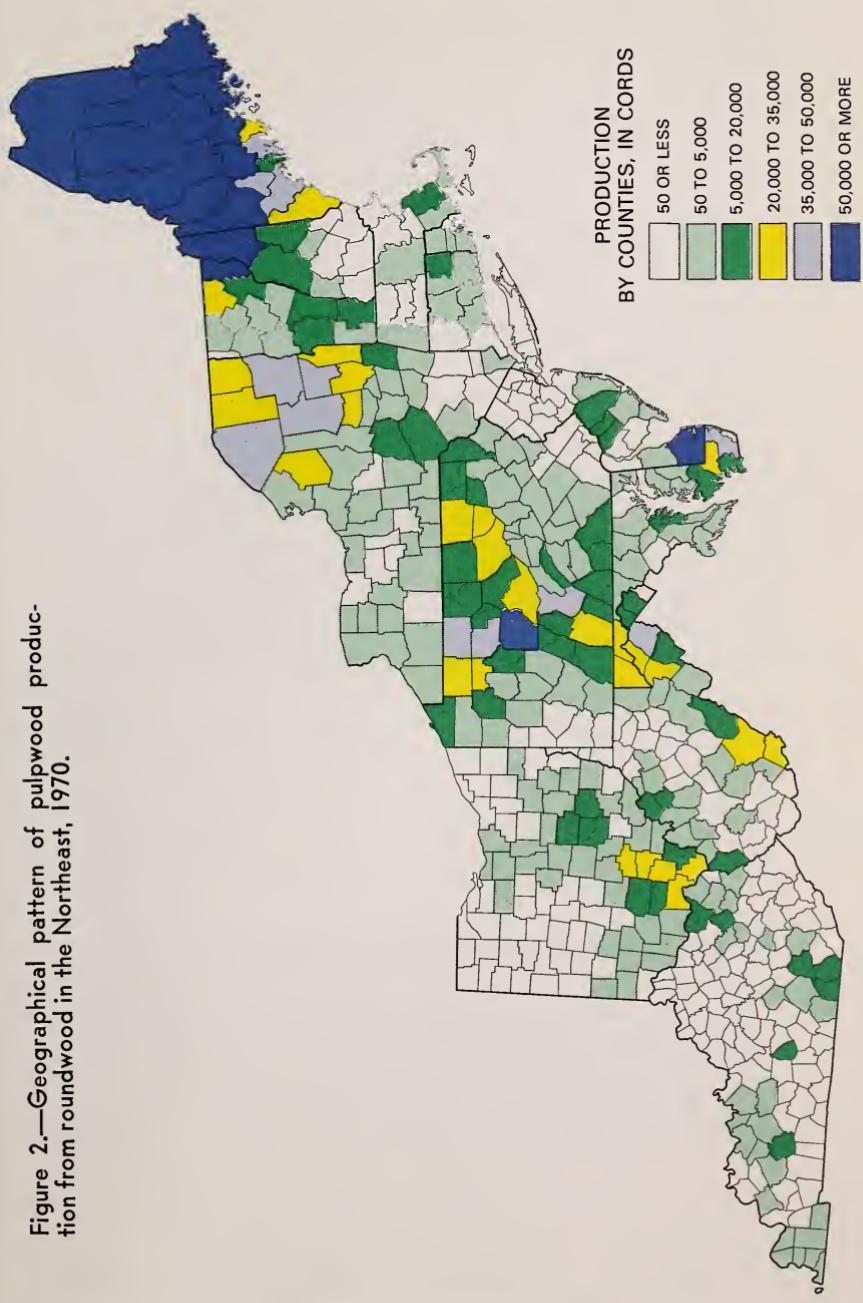
The production of pulpwood from roundwood increased 554,300 cords—11 percent above that of 1969. The 5,501,900 cords of roundwood produced in 1970 tops the previous record of 5,313,300 cords set in 1967.

This year's pulpwood production from roundwood was up from 1969 in six States—Kentucky, Maine, New Jersey, New York, Ohio, and Vermont. Most significant was Maine's 21 percent jump in roundwood production—from 2.7 million cords in 1969 to 3.2 million cords in 1970. Kentucky's 38 percent increase reflected the opening of that State's pulpwood resources through the establishment of new pulpmills. Increases in round pulpwood production in the remaining States reflected higher mill operating levels and increased production capacity. Production declines of more than 10 percent were registered in each of the four States of Delaware, Massachusetts, New Hampshire, and Rhode Island.

Fourteen Counties Top 50-Thousand-Cord Mark

Fourteen counties in five States produced more than 50 thousand cords of pulpwood from roundwood in 1970 (figure 2). This is the same number of counties that reported this

Figure 2.—Geographical pattern of pulpwood production from roundwood in the Northeast, 1970.



record in 1969, but a drop of six counties from the 1967 record level of 20 counties. Clearfield County, Pa., and Essex County, Vt., were restored to the list of high producers after having fallen below the 50-thousand-cord production level in 1969. Cumberland County, Maine, and Huntingdon County, Pa., (both high producers in 1969) were not among the counties producing over 50 thousand cords of pulpwood from roundwood in 1970.

Counties that produced over 50 thousand cords of pulpwood from roundwood in 1970 and their production totals are listed below:

<i>County and State</i>	<i>Production</i> (thousand cords)
Aroostook, Me.	706.2
Penobscot, Me.	475.7
Piscataquis, Me.	448.2
Somerset, Me.	370.7
Washington, Me.	360.5
Oxford, Me.	238.7
Franklin, Me.	179.9
Coos, N. H.	179.9
Hancock, Me.	85.8
Waldo, Me.	75.7
Kennebec, Me.	63.1
Sussex, Del.	61.2
Essex, Vt.	59.6
Clearfield, Pa.	52.7

Wood Chip Production Increases

The production of wood chips from plant residues for pulpwood increased 2 percent over the 1,120,800 cord equivalents produced in 1969. A comparison of pulpwood chip production by States between 1969 and 1970 is as follows:

State	1969 (thousand cords)	1970 (thousand cords)	Change (percent)
Connecticut	0.7	0.2	—71
Delaware	1.7	1.5	—12
Kentucky	84.3	124.4	+48
Maine	241.0	248.1	+ 3
Maryland	144.2	116.6	—19
Massachusetts	7.8	11.1	+42
New Hampshire	90.8	105.4	+16
New Jersey	.4	.9	+125
New York	111.6	121.8	+ 9
Ohio	68.5	92.0	+34
Pennsylvania	184.2	170.3	— 8
Rhode Island	1.3	1.5	+15
Vermont	34.9	24.5	—30
West Virginia	149.4	129.3	—13
TOTAL	1,120.8	1,147.6	+ 2

Chip production was up in eight States; New Jersey showed the highest percentage gain (125 percent) while Kentucky showed the highest absolute volume gain (40,100 cord equivalents). The 1970 chips from plant residues production accounted for 17 percent of the Northeastern pulpwood production total, while in 1969 this proportion was 18 percent.

Softwood chip production from plant residues dropped 10 percent between 1969 and 1970, while hardwood chip production rose 9 percent. This year's gain in the production of hardwood chips is the smallest percentage increase registered in the last 5 years. The decline in softwood chip production is the most severe since the 11 percent decline experienced between 1963 and 1964 when only 12 States were included in the Northeastern region.

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Table 1.—Total production of pulpwood in the Northeast, by sources and States, 1970

(In thousands of rough cords)¹

State	Source		
	From roundwood	From plant residues	From all sources
Connecticut	13.3	0.2	13.5
Delaware	62.3	1.5	63.8
Kentucky	115.2	124.4	239.6
Maine	3,220.9	248.1	3,469.0
Maryland	196.2	116.6	312.8
Massachusetts	14.4	11.1	25.5
New Hampshire	199.1	105.4	304.5
New Jersey	46.5	.9	47.4
New York	388.0	121.8	509.8
Ohio	251.8	92.0	343.8
Pennsylvania	607.1	170.3	777.4
Rhode Island	6.5	1.5	8.0
Vermont	124.8	24.5	149.3
West Virginia	255.8	129.3	385.1
All States	5,501.9	1,147.6	6,649.5

¹ 128 cubic feet of wood, bark, and air space.

Table 2.—Total production and receipts of pulpwood in the Northeast,
by States and species groups, 1970

State	Total production			Total receipts			Production surplus (+) or deficit (-)
	Softwood	Hardwood	Softwood	Hardwood	(D)		
Connecticut	6.1	7.4	(D)	(D)	—	+	(D)
Delaware	59.1	4.7	—	—	—	+ 63.8	
Kentucky	26.3	213.3	55.7	218.9	—	—35.0	
Maine	2,508.1	960.9	2,770.9	963.8	—	—265.7	
Maryland	190.1	122.7	126.7	308.9	—	—122.8	
Massachusetts	11.9	13.6	(D)	(D)	—	+	(D)
New Hampshire	112.8	191.7	160.8	349.5	—	—205.8	
New Jersey	38.4	9.0	42.6	23.0	—	—18.2	
New York	100.7	409.1	202.4	426.8	—	—119.4	
Ohio	13.4	330.4	3.1	437.7	—	—97.0	
Pennsylvania	58.2	719.2	176.5	726.0	—	—125.1	
Rhode Island	3.3	4.7	(D)	(D)	—	(D)	
Vermont	79.4	69.9	(D)	(D)	—	+	(D)
West Virginia	73.3	311.8	—	—	+ 385.1	—	
All States	3,281.1	3,368.4	3,580.7	3,484.7	—	—415.9	

(D) Data withheld to avoid disclosure for individual mills.

Table 3.—Pulpwood production from roundwood in the Northeast, by States and species groups, 1970
(In thousands of rough cords)

State	Softwood				Hardwood				Total production	
	Cut and retained in State		Shipped to other States		Cut and retained in State		Shipped to other States			
	Northeast	In	Northeast	Outside	Northeast	Softwood	In	Outside		
Connecticut	3.5	2.4	—	—	5.9	—	7.4	—	7.4	
Delaware	—	21.6	37.5	59.1	—	—	2.3	.9	3.2	
Kentucky	.3	.1	21.2	21.6	33.3	36.5	23.8	93.6	62.3	
Maine	2,282.6	33.6	4.0	2,320.2	827.7	73.0	—	—	115.2	
Maryland	13.0	15.6	91.7	120.3	64.1	10.6	1.2	75.9	3,220.9	
Massachusetts	—	8.8	—	8.8	—	5.6	—	—	196.2	
New Hampshire	30.6	16.6	—	47.2	147.1	4.8	—	—	14.4	
New Jersey	38.4	—	—	38.4	8.1	(*)	—	—	199.1	
New York	93.9	.4	3.6	97.9	268.5	7.1	14.5	290.1	46.5	
Ohio	—	13.4	—	13.4	230.3	8.1	—	—	238.4	
Pennsylvania	46.7	2.6	—	49.3	521.4	36.4	—	—	251.8	
Rhode Island	3.3	—	—	3.3	3.2	—	—	—	607.1	
Vermont	13.3	62.4	—	75.7	—	49.1	—	—	6.5	
West Virginia	—	58.6	9.7	68.3	—	123.3	64.2	187.5	124.8	
All States	2,525.6	236.1	167.7	2,929.4	2,103.7	364.2	104.6	2,572.5	5,501.9	

* Less than 50 cords.

Table 4.—Pulpwood chip production from plant residues in the Northeast
by States and species groups, 1970¹
(In thousands of rough cords)

State	Softwood				Hardwood				Total production	
	Produced and retained in State		Shipped to other States		Produced and retained in State		Shipped to other States			
	In State	Northeast	Outside	Northeast	Outside	Northeast	In	Northeast		
Connecticut	0.2	—	—	—	0.2	—	—	—	0.2	
Delaware	—	—	—	—	—	—	—	—	—	
Kentucky	—	2.1	2.6	4.7	73.8	14.8	31.1	119.7	124.4	
Maine	182.6	5.3	—	187.9	55.6	4.6	—	60.2	248.1	
Maryland	.2	49.4	20.2	69.8	6.3	40.5	—	46.8	116.6	
Massachusetts	—	3.1	—	3.1	3.4	4.6	—	8.0	11.1	
New Hampshire	42.2	23.4	—	65.6	31.7	8.1	—	39.8	105.4	
New Jersey	—	—	—	—	.6	.3	—	.9	.9	
New York	1.3	1.4	.1	2.8	79.6	16.7	22.7	119.0	121.8	
Ohio	—	—	—	—	91.6	.4	—	92.0	92.0	
Pennsylvania	7.7	1.2	—	8.9	127.9	33.5	—	161.4	170.3	
Rhode Island	—	—	—	—	—	1.5	—	1.5	1.5	
Vermont	—	3.7	—	3.7	—	20.7	.1	20.8	24.5	
West Virginia	—	3.1	1.9	5.0	—	76.1	48.2	124.3	129.3	
All States	234.2	92.7	24.8	351.7	470.5	223.3	102.1	795.9	1,147.6	

¹ Includes sawmill slabs and edgings, veneer cores, and post and pole trimmings.

Table 5.—Pulpwood receipts from roundwood in the Northeast by States, and species groups, 1970
(In thousands of rough cords)

State	Softwood				Hardwood				Total receipts (D)	
	Cut and retained in State	Receipts from other States			Cut and retained in State	Receipts from other States				
		In Northeast	Outside Northeast	Total softwood		In Northeast	Outside Northeast	Total hardwood		
Connecticut	3.5	(D)	(D)	(D)	—	—	(D)	(D)	(D)	
Delaware	—	—	—	—	—	—	—	—	—	
Kentucky	.3	—	54.2	54.5	33.3	—	30.0	63.3	117.8	
Maine	2,282.6	8.8	252.1	2,543.5	827.7	5.0	71.5	904.2	3,447.7	
Maryland	13.0	59.9	50.2	123.1	64.1	147.4	20.8	232.3	355.4	
Massachusetts	—	—	—	—	—	—	—	—	—	
New Hampshire	30.6	40.8	12.8	84.2	147.1	110.7	39.7	297.5	381.7	
New Jersey	38.4	—	—	38.4	8.1	—	—	8.1	46.5	
New York	93.9	62.7	44.5	201.1	268.5	16.6	23.1	308.2	509.3	
Ohio	—	—	—	—	230.3	43.1	12.6	286.0	286.0	
Pennsylvania	46.7	52.4	12.9	112.0	521.4	29.2	2.3	552.9	664.9	
Rhode Island	3.3	(D)	—	(D)	3.2	(D)	(D)	(D)	(D)	
Vermont	13.3	(D)	(D)	—	—	(D)	—	—	—	
West Virginia	—	—	—	—	—	—	—	—	—	
All States	2,525.6	236.1	431.9	3,193.6	2,103.7	364.4	200.0	2,668.1	5,861.7	

(D) Data withheld to avoid disclosure for individual mills.

Table 6.—Pulpwood chip receipts from plant residues in the Northeast by States and species groups, 1970¹
(In thousands of rough cord equivalents)

State ²	Softwood				Hardwood				Total receipts	
	Produced and retained in State	Receipts from other States			Produced and retained in State	Receipts from other States				
		In	Outside	Northeast		In	Outside	Northeast		
Connecticut	0.2	(D)	(D)	(D)	—	(D)	(D)	(D)	(D)	
Kentucky	—	—	1.2	1.2	73.8	—	81.8	155.6	156.8	
Maine	182.6	24.0	20.8	227.4	55.6	.9	3.1	59.6	287.0	
Maryland	.2	3.4	(*)	3.6	6.3	67.4	2.9	76.6	80.2	
Massachusetts	—	(D)	(D)	(D)	3.4	(D)	(D)	(D)	(D)	
New Hampshire	42.2	7.1	27.3	76.6	31.7	8.8	11.5	52.0	128.6	
New Jersey	—	4.2	—	4.2	.6	14.3	—	14.9	19.1	
New York	1.3	—	—	1.3	79.6	23.8	15.2	118.6	119.9	
Ohio	—	3.1	—	3.1	91.6	52.4	7.7	151.7	154.8	
Pennsylvania	7.7	45.9	10.9	64.5	127.9	44.7	.5	173.1	237.6	
Rhode Island	—	(D)	(D)	(D)	—	(D)	(D)	(D)	(D)	
All States	234.2	92.7	60.2	387.1	470.5	223.4	122.7	816.6	1,203.7	

¹ Includes sawmill slabs and edgings, veneer cores, and post and pole trimmings.

² States with no receipts are omitted.

(D) Data withheld to avoid disclosure for individual mills.

(*) Less than 50 cords.

Table 7.—Pulpwood from roundwood received from States outside the Northeast, by States (or provinces) of origin and species groups, 1970

(In thousands of rough cords)

Receiving State ¹	State (or province) of origin	Total softwood	Total hardwood	All species
Kentucky	Alabama	0.9	0.2	1.1
	Illinois	—	1.1	1.1
	Indiana	—	5.6	5.6
	Mississippi	44.5	7.7	52.2
	Missouri	.3	5.6	5.9
	Tennessee	8.5	9.8	18.3
Maine	New Brunswick	227.0	60.5	287.5
	Quebec	25.1	11.0	36.1
Maryland	Virginia	50.2	20.8	71.0
New Hampshire	New Brunswick	6.5	—	6.5
	New Brunswick	6.3	39.7	46.0
New York	Quebec	1.8	—	1.8
	Ontario	.7	11.4	12.1
	Quebec	42.0	11.7	53.7
Ohio	Alabama	—	.7	.7
	Indiana	—	9.1	9.1
	Michigan	—	2.0	2.0
	North Carolina	—	.8	.8
Pennsylvania	Ontario	2.2	—	2.2
	Virginia	10.7	2.3	13.0
Vermont	Quebec	5.2	—	5.2
All States		431.9	200.0	631.9

¹ States with no receipts are omitted.

Table 8.—Pulpwood chip receipts from wood-using plants outside the Northeast, by States (or provinces) of origin and species groups, 1970
(In thousands of rough cords)

Receiving State ¹	State (or province) of origin	Total softwood	Total hardwood	All species
Kentucky	Alabama	—	0.3	0.3
	Arkansas	0.2	—	.2
	Illinois	.3	5.9	6.2
	Indiana	—	17.8	17.8
	Mississippi	.1	3.1	3.2
	Missouri	.5	13.9	14.4
	Tennessee	.1	40.8	40.9
Maine	New Brunswick	6.8	1.2	8.0
	Quebec	14.0	1.9	15.9
Maryland	Virginia	(*)	2.9	2.9
New Hampshire	Quebec	27.3	11.5	38.8
New York	Ontario	—	12.0	12.0
	Quebec	—	3.2	3.2
Ohio	Indiana	—	1.1	1.1
	Tennessee	—	.5	.5
	Virginia	—	6.1	6.1
Pennsylvania	Virginia	10.9	.5	11.4
All States		60.2	122.7	182.9

¹ States with no receipts are omitted.

(*) Less than 50 cords.

Table 9.—Pulpwood production from roundwood in the Northeast, by States and species groups, 1970

(In thousands of rough cords)

State	Softwood			Hardwood			All species
	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow-poplar	Oak and hickory	
Connecticut	—	—	5.9	5.9	—	2.9	4.5
Delaware	—	—	59.1	59.1	—	1.1	2.1
Kentucky	(*)	(*)	21.6	21.6	3.2	40.3	50.1
Maine	1,914.0	259.5	146.7	2,320.2	45.1	41.7	813.9
Maryland	.2	.6	119.5	120.3	7.2	60.3	8.4
Massachusetts	—	—	8.8	8.8	—	2.3	3.3
New Hampshire	36.6	7.5	3.1	47.2	1.6	—	150.3
New Jersey	—	—	38.4	38.4	—	—	8.1
New York	66.9	8.5	22.5	97.9	17.8	10.1	262.2
Ohio	.6	.7	12.1	13.4	13.3	77.4	147.7
Pennsylvania	.1	6.5	42.7	49.3	66.3	164.5	327.0
Rhode Island	—	—	3.3	3.3	—	2.3	.9
Vermont	68.6	3.0	4.1	75.7	9.3	.4	39.4
West Virginia	8.9	5.6	53.8	68.3	31.6	140.1	15.8
All States	2,095.9	291.9	541.6	2,929.4	195.4	543.4	1,833.7
							2,572.5
							5,501.9

¹ Chiefly maple, beech, gums, elms, and birch species.

* Less than 50 cords.

Table 10.—Pulpwood production from roundwood in southern New England by States and countries and species groups, 1970

(In thousands of rough cords)

State county ¹	Softwood				Hardwood				All species
	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow- poplar	Oak and hickory	Other hardwoods	Total	
Connecticut:	—	—	5.9	5.9	—	2.9	4.5	7.4	13.3
Hartford	—	—	1.6	1.6	—	—	—	—	—
Litchfield	—	—	(*)	(*)	—	—	—	—	1.6
Middlesex	—	—	.6	.6	—	—	—	—	(*)
New Haven	—	—	.3	.3	—	—	—	—	.6
New London	—	—	.6	.6	—	—	—	—	.3
Tolland	—	—	1.3	1.3	—	.4	2.9	3.3	3.9
Windham	—	—	1.5	1.5	—	.2	—	.2	1.5
Massachusetts:	—	—	8.8	8.8	—	2.3	1.6	3.9	5.4
Barnstable	—	—	.1	.1	—	—	—	—	—
Berkshire	—	—	—	—	—	—	—	—	—
Bristol	—	—	2.1	2.1	—	.1	.6	.7	.7
Franklin	—	—	—	—	—	.6	.7	1.3	3.4
Plymouth	—	—	6.5	6.5	—	(*)	(*)	(*)	(*)
Worcester	—	—	.1	.1	—	1.6	2.0	3.6	10.1
Rhode Island:	—	—	3.3	3.3	—	—	—	—	.1
Kent	—	—	1.0	1.0	—	2.3	.9	3.2	6.5
Providence	—	—	1.8	1.8	—	1.4	.4	1.8	2.8
Washington	—	—	.5	.5	—	.5	.3	.8	2.6

¹ Counties with no production are omitted.
(*) Less than 50 cords.

Bones, James T. and David R. Dickson.

1971. Pulpwood Production in the Northeast—1970. NE.
Forest Exp. Sta., Upper Darby, Pa.
34 pp., illus. (USDA Forest Serv. Resource Bull. NE-24)

An annual report based upon canvasses of pulpwood production in the Northeast. It contains data about pulpwood production from roundwood in the 14 Northeastern States by counties and species groups, and pulpwood chip production from plant residues. Comparisons are made with the previous year's production data. Trends in pulpwood production for the past 8 years are shown for the Northeast.

861.0 (74):721:792

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An annual report based upon canvasses of pulpwood production in the Northeast. It contains data about pulpwood production from roundwood in the 14 Northeastern States by counties and species groups, and pulpwood chip production from plant residues. Comparisons are made with the previous year's production data. Trends in pulpwood production for the past 8 years are shown for the Northeast.

Bones, James T. and David R. Dickson. (USDA Forest Serv. Resource Bull. NE-24)

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An annual report based upon canvasses of pulpwood production in the Northeast. It contains data about pulpwood production from roundwood in the 14 Northeastern States by counties and species groups, and pulpwood chip production from plant residues. Comparisons are made with the previous year's production data. Trends in pulpwood production for the past 8 years are shown for the Northeast.

Bones, James T. and David R. Dickson.
1971. Pulpwood Production in the Northeast—1970. NE.
Forest Exp. Sta., Upper Darby, Pa.
34 pp., illus. (USDA Forest Serv. Resource Bull. NE-24)



Table 11.—Pulpwood production from roundwood in Delaware and New Jersey
by States and counties and species groups, 1970

(In thousands of rough cords)

State county ¹	Softwood			Hardwood			All species		
	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow- poplar	Oak and hickory			
Delaware:	—	—	59.1	59.1	—	1.1	2.1	3.2	62.3
Kent	—	—	1.1	1.1	—	—	—	—	1.1
Sussex	—	—	58.0	58.0	—	1.1	2.1	3.2	61.2
New Jersey:	—	—	38.4	38.4	—	—	8.1	8.1	46.5
Atlantic	—	—	3.8	3.8	—	—	.2	.2	4.0
Burlington	—	—	15.1	15.1	—	—	3.9	3.9	19.0
Camden	—	—	7.6	7.6	—	—	1.5	1.5	9.1
Cape May	—	—	.6	.6	—	—	(*)	(*)	.6
Gloucester	—	—	7.4	7.4	—	—	2.5	2.5	9.9
Ocean	—	—	3.9	3.9	—	—	—	—	3.9
Warren	—	—	—	—	—	—	(*)	(*)	(*)

¹ Counties with no production are omitted.

(*) Less than 50 cords

Table 12.—Pulpwood production from roundwood in Kentucky by counties and species groups, 1970
(In thousands of rough cords)

1 Counties with no production are omitted.

(*) Less than 50 cords

Table 13.—Pulpwood production from roundwood in Maine by counties and species groups, 1970
(In thousands of rough cords)

County	Softwood			Hardwood			All species
	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow-poplar	Oak and hickory	
Androscoggin	5.8	5.6	15.9	27.3	0.2	6.1	19.8
Aroostook	621.2	15.8	.1	637.1	20.0	—	49.1
Cumberland	2.8	3.2	16.2	22.2	(*)	6.1	21.1
Franklin	59.2	9.3	7.6	76.1	—	4.0	99.8
Hancock	53.9	9.7	5.2	68.8	.3	2.0	14.7
Kennebec	11.4	8.0	14.0	33.4	.2	1.6	27.9
Knox	13.2	2.9	4.6	20.7	(*)	1.6	6.8
Lincoln	12.2	4.2	15.7	32.1	(*)	1.6	14.6
Oxford	40.6	23.7	16.2	80.5	.9	5.0	152.3
Penobscot	250.7	72.5	5.0	328.2	11.1	—	136.4
Piscataquis	350.6	14.4	2.6	367.6	3.6	1.6	75.4
Sagadahoc	3.5	2.3	8.3	14.1	.1	2.2	2.1
Somerset	282.2	15.1	5.9	303.2	.2	—	67.3
Waldo	20.7	13.8	9.0	43.5	.8	1.6	29.8
Washington	185.7	58.8	14.7	259.2	7.7	2.3	91.3
York	.3	.2	5.7	6.2	(*)	6.0	11.8
Total	1,914.0	259.5	146.7	2,320.2	45.1	41.7	813.9
							900.7
							3,220.9

(*) Less than 50 cords

Table 14.—Pulpwood production from roundwood in Maryland by counties and species groups, 1970
(In thousands of rough cords)

County ¹	Softwood				Hardwood				All species
	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow-poplar	Oak and hickory	Other hardwoods	Total	
Allegany	0.1	0.2	1.7	2.0	—	27.0	1.8	28.8	30.8
Anne Arundel	—	—	4.0	4.0	3.5	—	—	3.5	7.5
Baltimore	—	—	(*)	(*)	—	.2	.1	.3	.3
Calvert	(*)	.1	4.8	4.9	—	.1	(*)	.1	.5
Caroline	—	—	3.4	3.4	—	(*)	.4	.4	3.8
Carroll	—	—	.1	.1	—	(*)	—	(*)	.1
Cecil	—	—	—	—	—	—	2.6	2.2	4.8
Charles	—	—	4.2	4.2	—	.1	.1	.2	4.4
Dorchester	—	—	15.9	15.9	—	.2	.8	1.0	16.9
Frederick	—	—	—	—	—	.4	.2	.6	.6
Garrett	.1	.1	.9	1.1	3.7	27.3	1.6	32.6	33.7
Harford	—	—	—	—	—	(*)	—	(*)	(*)
Howard	—	—	.1	.1	—	(*)	—	(*)	.1
Kent	—	—	—	—	—	(*)	—	(*)	(*)
Montgomery	—	—	—	—	—	(*)	—	(*)	(*)
Prince Georges	—	—	1.0	1.0	—	.2	.2	.4	1.4
Queen Anne's	(*)	.1	.3	.3	—	—	—	—	.3
St. Mary's	—	—	.5	.6	—	—	—	—	.6
Somerset	—	—	17.3	17.3	(*)	(*)	—	(*)	17.3
Talbot	—	—	1.4	1.4	—	(*)	—	(*)	1.4
Washington	(*)	.1	1.5	1.6	(*)	1.7	.8	2.5	4.1
Wicomico	—	—	21.2	21.2	(*)	.3	.2	.5	21.7
Worcester	—	—	41.2	41.2	—	.2	—	.2	41.4
Total	0.2	0.6	119.5	120.3	7.2	60.3	8.4	75.9	196.2

¹ Counties with no production are omitted.

(*) Less than 50 cords

Table 15.—Pulpwood production from roundwood in New Hampshire by counties and species groups, 1970

(In thousands of rough cords)

County	Softwood			Hardwood			All species
	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow-poplar	Oak and hickory	
Belknap	—	—	0.2	0.2	—	—	0.2
Carroll	1.6	2.1	1.0	4.7	(*)	—	6.7
Cheshire	—	(*)	—	(*)	—	—	(*)
Coos	32.0	4.4	.8	37.2	1.6	—	179.9
Grafton	2.9	1.0	1.1	5.0	(*)	—	2.5
Hillsboro	—	(*)	(*)	(*)	(*)	—	(*)
Merrimack	—	(*)	(*)	(*)	—	—	(*)
Rockingham	—	(*)	(*)	(*)	—	—	(*)
Strafford	—	(*)	(*)	(*)	—	—	(*)
Sullivan	.1	—	—	.1	—	—	.1
Total	36.6	7.5	3.1	47.2	1.6	—	150.3
							151.9
							199.1

(*) Less than 50 cords

Table 16.—Pulpwood production from roundwood in New York by counties and species groups, 1970

(In thousands of rough cords)

County ¹	Softwood				Hardwood				All species
	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow- poplar	Oak and hickory	Other hardwoods	Total	
Albany	—	—	—	—	—	0.1	0.4	0.5	0.5
Broome	—	—	—	—	(*)	—	2.2	2.2	2.2
Cattaraugus	—	—	—	—	4.5	—	.2	4.7	4.7
Cayuga	—	—	—	—	.1	—	.7	.8	.8
Chautauqua	—	—	—	—	.2	—	.9	1.1	1.1
Chemung	—	—	0.1	0.1	—	—	—	—	.1
Chenango	1.3	—	.5	1.8	.1	—	2.4	2.5	4.3
Clinton	4.9	1.2	2.4	8.5	.6	—	24.2	24.8	33.3
Columbia	—	—	—	—	—	(*)	.2	.2	.2
Cortland	(*)	—	.3	.3	(*)	—	.3	.3	.6
Delaware	.3	—	1.0	1.3	(*)	.2	3.5	3.7	5.0
Erie	—	—	—	—	.4	—	.3	.7	.7
Essex	1.1	—	—	1.1	2.2	.1	40.7	42.0	44.1
Franklin	13.1	1.2	2.6	16.9	1.9	(*)	9.3	11.2	28.1
Fulton	.7	—	.4	1.1	.1	1.7	19.4	21.2	22.3
Genesee	—	—	—	—	—	—	.1	.1	.1
Greene	—	—	—	—	—	—	.3	.4	.4
Hamilton	8.7	(*)	—	8.7	.3	1.6	39.3	41.2	49.9
Herkimer	2.9	.2	—	3.4	(*)	(*)	1.5	1.5	4.9
Jefferson	(*)	.1	1.2	1.3	(*)	—	2.0	2.0	3.3
Lewis	2.9	1.8	2.2	6.9	.5	—	14.8	15.3	22.2
Livingston	—	—	—	—	.2	—	—	.2	.2

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Table 16.—Continued

County ¹	Softwood				Hardwood				All species
	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow-poplar	Oak and hickory	Other hardwoods	Total	
Montgomery	(*)	.1	—	.1	—	.3	1.5	1.8	1.9
Niagara	—	—	—	—	—	—	.3	.3	.3
Oneida	1.2	.9	.8	2.9	.1	—	1.3	1.4	4.3
Onondaga	.4	.1	—	.5	(*)	—	.3	.3	.8
Orleans	—	—	—	—	.1	—	—	—	.1
Oswego	(*)	.4	.9	1.3	—	—	1.4	1.4	2.7
Orsego	1.0	—	3.5	4.5	(*)	(*)	.7	.7	5.2
Rensselaer	—	—	—	—	—	1.1	5.7	6.8	6.8
St. Lawrence	26.9	2.5	4.0	33.4	.9	—	11.0	11.9	45.3
Saratoga	.6	(*)	1.6	2.2	1.7	1.0	19.7	22.4	24.6
Schenectady	—	—	—	—	—	(*)	.2	.2	.2
Schoharie	.1	—	.4	.5	(*)	.2	.9	1.1	1.6
Schuyler	—	—	—	—	.1	—	—	.1	.1
Steuben	—	—	—	—	.4	—	—	.4	.4
Sullivan	—	—	—	—	(*)	—	.4	.4	.4
Tioga	—	—	—	—	(*)	.8	.2	2.3	3.3
Ulster	—	—	—	—	(*)	(*)	(*)	(*)	(*)
Warren	.7	—	.2	.9	1.7	2.0	33.4	37.1	38.0
Washington	.1	—	.1	.2	.4	1.5	20.0	21.9	22.1
Wayne	—	—	—	—	.1	—	—	.1	.1
Westchester	—	—	—	—	(*)	(*)	.1	.1	.1
Wyoming	—	—	—	—	.4	—	.3	.7	.7
Total	66.9	8.5	22.5	97.9	17.8	10.1	262.2	290.1	388.0

¹ Counties with no production are omitted.

(*) Less than 50 cords

Table 17.—Pulpwood production from roundwood in Ohio by counties and species groups, 1970

(In thousands of rough cords)

County ¹	Softwood					Hardwood			All species
	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow-poplar	Oak and hickory	Other hardwoods	Total	
Adams	—	—	—	—	—	—	—	2.8	2.8
Ashland	—	—	—	—	0.8	.6	1.4	1.4	
Athens	—	—	—	1.0	3.3	.6	4.9	4.9	
Belmont	—	—	—	.5	(*)	.5	1.0	1.0	
Brown	(*)	(*)	(*)	(*)	(*)	.2	.4	.4	
Butler	—	—	—	.4	—	.5	.9	.9	
Carroll	—	—	—	—	.4	—	.4	.4	
Clermont	—	—	—	.2	—	.3	.5	.5	
Clinton	—	—	—	1.1	.7	1.1	2.9	2.9	
Coshocton	—	—	—	—	9.6	.4	10.0	10.0	
Delaware	—	—	—	—	(*)	—	(*)	(*)	(*)
Erie	—	—	—	—	.7	1.0	1.7	1.7	
Fairfield	—	—	—	—	.5	1.5	.3	2.3	2.3
Franklin	—	—	—	—	(*)	(*)	(*)	(*)	(*)
Gallia	.3	.3	6.3	.1	3.7	7.1	10.9	17.2	
Greene	—	—	—	.1	—	.2	.3	.3	
Guernsey	—	—	—	—	6.3	—	6.3	6.3	
Harrison	(*)	(*)	(*)	(*)	.4	—	.4	.4	.4
Highland	—	—	—	.2	—	1.5	1.7	1.7	
Hocking	—	—	—	3.6	12.4	5.5	21.5	21.5	
Holmes	—	—	—	—	1.3	—	1.3	1.3	
Huron	—	—	—	—	1.0	2.5	3.5	3.5	
Jackson	.1	.1	.4	.5	.7	2.6	30.0	33.3	33.8
Knox	—	—	—	—	(*)	2.5	(*)	2.5	2.5
Lawrence	.1	.1	1.9	2.1	.2	1.2	19.3	20.7	22.8

CONTINUED

Table 17.—Continued

County ¹	Softwood				Hardwood				All species
	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow-poplar	Oak and hickory	Other hardwoods	Total	
Licking	—	—	—	—	—	4.0	—	4.0	4.0
Lorain	—	—	—	—	.3	.6	.9	.9	.9
Mahoning	(*)	(*)	.2	.2	—	—	—	—	.2
Meigs	.1	.1	2.2	2.4	.1	1.5	.9	2.5	4.9
Monroe	—	—	(*)	(*)	—	(*)	(*)	(*)	(*)
Morgan	—	—	(*)	(*)	—	(*)	(*)	(*)	(*)
Morrow	—	—	—	—	—	.1	—	.1	.1
Muskingum	—	—	—	—	—	5.7	—	5.7	5.7
Noble	—	—	—	—	—	.2	—	.2	.2
Perry	—	—	—	—	—	.2	—	.2	.2
Pickaway	—	—	—	—	—	.3	—	.3	.3
Pike	—	—	—	—	—	.3	—	.3	.3
Preble	—	—	—	—	—	.1	.1	.2	.2
Richland	—	—	—	—	—	.1	.1	.2	.2
Ross	—	—	—	—	.9	3.0	8.6	12.5	12.5
Scioto	(*)	(*)	(*)	(*)	.6	3.0	24.5	28.1	28.1
Seneca	—	—	—	—	—	.1	.1	.2	.2
Stark	—	—	—	—	—	.3	—	.3	.3
Tuscarawas	—	—	—	—	—	1.4	—	1.4	1.4
Vinton	(*)	(*)	(*)	(*)	1.5	5.0	19.8	26.3	26.3
Warren	—	—	—	—	.3	—	.4	.7	.7
Washington	.1	.1	1.7	1.9	(*)	(*)	(*)	(*)	1.9
Wayne	—	—	—	—	—	(*)	(*)	(*)	(*)
Wyandot	—	—	—	—	—	(*)	(*)	(*)	(*)
Total	0.6	0.7	12.1	13.4	13.3	77.4	147.7	238.4	251.8

¹ Counties with no production are omitted.

(*) Less than 5 cords.

Table 18.—Pulpwood production from roundwood in Pennsylvania by counties and species groups, 1970

(In thousands of rough cords)

County ¹	Softwood			Hardwood			All species
	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow-poplar	Oak and hickory	
Adams	—	—	0.3	0.3	—	3.8	5.7
Armstrong	—	—	—	—	.2	.3	.6
Bedford	0.1	0.4	4.5	5.0	6.8	16.1	29.6
Berks	—	—	.1	.1	—	.4	.6
Blair	—	(*)	.4	.4	.1	1.5	4.4
Bradford	—	—	—	—	6.2	1.6	19.1
Butler	—	—	—	—	(*)	(*)	.3
Cambria	—	—	.6	.6	.4	4.1	3.0
Cameron	—	(*)	.1	.1	.6	2.3	6.2
Carbon	—	—	.1	.1	(*)	.2	.4
Centre	—	.8	2.7	3.5	1.5	15.3	7.8
Clarion	(*)	(*)	.1	.1	—	—	.6
Clearfield	(*)	1.7	5.3	7.0	2.0	11.9	31.8
Clinton	(*)	.2	1.0	1.2	.3	12.7	3.8
Columbia	—	—	.1	.1	.1	.6	1.9
Crawford	—	—	—	—	.8	—	—
Cumberland	—	—	.2	.2	—	2.9	1.5
Dauphin	—	—	.6	.6	—	.7	.2
Elk	—	.2	.5	.7	7.6	4.8	26.5
Erie	—	—	.7	.7	—	—	4.5
						4.5	4.5
						—	5.2

CONTINUED

Table 18.—Continued

County ¹	Softwood			Hardwood			All species
	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow- poplar	Oak and hickory	
Fayette	—	(*)	(*)	.5	.5	.9	3.3
Forest	—	(*)	.5	7.4	.1	13.7	21.2
Franklin	—	(*)	1.4	1.4	(*)	10.3	15.3
Fulton	—	(*)	2.7	2.7	.1	5.5	16.7
Greene	—	—	—	—	(*)	(*)	11.7
Huntingdon	1.7	8.5	10.2	2.0	18.3	11.9	(*)
Indiana	—	(*)	1.2	1.2	.2	1.2	42.4
Jefferson	—	.8	2.6	3.4	.2	1.5	32.2
Juniata	—	.2	1.4	1.6	.1	3.0	.8
Lackawanna	—	—	—	—	(*)	.1	.8
Lancaster	—	(*)	(*)	(*)	(*)	—	—
Lawrence	—	—	—	—	—	—	—
Lebanon	—	—	—	—	—	—	—
Luzerne	—	—	—	—	—	—	—
Lycoming	—	—	.1	.3	.4	.6	—
McKean	—	—	.1	.2	.3	.4	—
Mercer	—	—	.2	.5	.2	.7	—
Mifflin	—	—	—	—	.7	1.2	—
Monroe	—	—	—	—	.1	.3	—
Montour	—	—	—	—	.1	.3	—
Northampton	—	—	—	—	.1	.3	.1
Northumberland	—	—	—	—	.4	.2	.8

¹ Counties with no production are omitted.

(*) Less than 50 cords.

Table 19.—Pulpwood Production from roundwood in Vermont by counties and species groups, 1970
(In thousands of rough cords)

County ¹	Softwood			Hardwood			All species
	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow-poplar	Oak and hickory	
Addison	0.4	—	0.1	0.5	0.2	—	1.3
Bennington	1.0	—	.1	1.1	—	0.1	2.7
Caledonia	6.5	0.8	1.3	8.6	.7	—	4.2
Chittenden	—	—	1.6	1.6	—	—	1.0
Essex	31.2	.7	.1	32.0	7.0	—	20.6
Franklin	.1	(*)	—	.1	—	—	.5
Lamoille	1.7	—	—	1.7	—	—	.3
Orange	.7	(*)	(*)	.7	(*)	—	(*)
Orleans	13.7	1.5	.1	15.3	1.1	—	4.3
Rutland	3.0	—	.1	3.1	.2	.3	3.4
Washington	.5	(*)	(*)	.1	.6	—	(*)
Windham	3.8	(*)	(*)	.6	4.4	—	(*)
Windsor	6.0	(*)	(*)	6.0	.1	—	.6
Total	68.6	3.0	4.1	75.7	9.3	0.4	39.4
							49.1
							124.8

¹ Counties with no production are omitted.

(*) Less than 50 cords.

Table 20.—Pulpwood production from roundwood in West Virginia by counties and species groups, 1970

(In thousands of rough cords)

County	Softwood			Hardwood			All species	
	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow-poplar	Oak and hickory	Other hardwoods	
Berkeley	(*)	(*)	5.0	5.0	(*)	2.2	0.9	3.1
Boone	(*)	0.1	.5	.6	—	—	—	.6
Braxton	—	—	—	—	(*)	(*)	(*)	(*)
Cabell	0.1	(*)	.2	.3	(*)	.1	.1	.4
Calhoun	(*)	(*)	(*)	(*)	(*)	—	(*)	(*)
Doddridge	(*)	(*)	(*)	(*)	0.1	.3	(*)	(*)
Fayette	(*)	(*)	(*)	(*)	(*)	.1	(*)	.4
Gilmer	—	—	—	—	(*)	—	(*)	.1
Grant	.6	4.1	5.8	4.2	(*)	—	(*)	.1
Greenbrier	(*)	.4	2.7	3.1	20.2	1.7	26.1	(*)
Hampshire	1.7	.9	9.9	12.5	4.2	21.2	1.4	33.1
Hardy	.6	.3	1.9	2.8	2.1	10.2	.7	26.8
Harrison	—	—	—	—	(*)	(*)	13.0	39.3
Jackson	.7	.4	2.6	3.7	(*)	(*)	(*)	15.8
Jefferson	(*)	(*)	(*)	(*)	.2	(*)	(*)	(*)
Kanawha	(*)	(*)	(*)	(*)	(*)	—	—	(*)
Lincoln	—	—	—	—	(*)	(*)	(*)	(*)
McDowell	—	—	—	—	(*)	(*)	(*)	(*)
Marion	.5	.2	1.7	2.4	.1	.3	(*)	(*)
Mason	—	—	(*)	(*)	—	(*)	(*)	(*)
Mercer	.6	.3	2.1	3.0	2.9	14.2	—	2.8
Mineral	—	—	—	—	—	—	.9	18.0

CONTINUED

Table 20.—Continued

County	Softwood			Hardwood			All species
	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow-poplar	Oak and hickory	
Mingo	—	(*)	(*)	—	(*)	—	(*)
Monroe	.1	.6	4.0	4.7	5.0	17.4	24.9
Morgan	.6	.3	8.0	8.9	.8	7.5	10.1
Nicholas	(*)	(*)	.1	.1	.1	(*)	.8
Pendleton	.1	(*)	.3	.4	.7	2.8	.3
Pleasants	.1	.1	.3	.5	(*)	(*)	.1
Pocahontas	.1	.2	1.3	1.6	1.6	5.9	.8
Preston	(*)	(*)	(*)	(*)	.5	2.2	.5
Putnam	.6	(*)	2.0	2.9	.2	.7	(*)
Raleigh	—	(*)	(*)	(*)	—	—	—
Randolph	.1	(*)	.3	.4	.5	2.5	.2
Ritchie	.2	.1	.6	.9	.2	.7	(*)
Roane	(*)	(*)	(*)	(*)	(*)	(*)	.9
Summers	(*)	(*)	.4	.4	.1	(*)	.1
Tucker	(*)	(*)	(*)	(*)	.3	.9	1.3
Tyler	(*)	(*)	(*)	(*)	.6	2.5	.2
Wayne	.1	(*)	.3	.4	(*)	(*)	(*)
Webster	(*)	—	(*)	(*)	(*)	(*)	(*)
Wirt	.9	.5	3.2	4.6	.1	(*)	.7
Wood	.7	.3	2.3	3.3	.2	1.4	.1
Total	8.9	5.6	53.8	68.3	31.6	140.1	15.8
							187.5
							255.8

¹ Counties with no production are omitted.

(*) Less than 50 cords.

ERRATA SHEET

for PULPWOOD PRODUCTION IN THE NORTHEAST—1969. By James T. Bones and David R. Dickson. USDA Forest Serv. Resource Bull. NE-22. Forest Exp. Sta., Upper Darby, Pa. 34 pp., illus. 1970.

The Pennsylvania wood chip production total contained in the 1969 pulpwood production report is incorrect. Wood chip production for the state should have been 184.2 thousand cords instead of the 336.4 thousand cords that appears in the report.

The following corrections should be made:

Page	Change	
	From	To
2—¶ 4, 1ine 2	4 percent	2 percent
2—¶ 4, line 3	more than 3 %	44,800 cords
2—¶ 4, line 4	6,220,600	6,068,400
3—Fig. 1, point on hard- wood line for 1969	.884	.732
7—¶ 1, line 2	35 percent	19 percent
7—¶ 1, line 3	Pennsylvania	Maryland
7—¶ 1, line 3	These states	Ohio
7—¶ 1, line 4	their	its
7—Tabulation, line for Pennsylvania	336.4 +112	184.2 +16
7—Tabulation total	1273.0 +35	1120.8 +19
7—¶ 2, line 2	1,273,000	1,120,800
7—¶ 2, line 5	20 percent	18 percent
7—¶ 3, line 3	45.3 percent	20.3 percent
11—table 1, <i>Pennsylvania</i>	336.4 958.3	184.2 806.1
11—table 1, <i>All states</i>	1,273.0 6,220.6	1,120.8 6,068.4
12—table 2, <i>Pennsylvania</i>	891.6 892.5	739.4 740.3
12—table 2, <i>All states</i>	3,266.1 3,299.2	3,113.9 3,147.0
14—table 4, <i>Pennsylvania</i>	299.6 328.9 336.4	147.4 176.7 184.2
14—table 4, <i>All states</i>	557.7 884.2 1,273.0	405.5 732.0 1,120.8
16—table 6, <i>Pennsylvania</i>	299.6 340.6 389.8	147.4 188.4 237.6
16—table 6, <i>All states</i>	557.7 830.9 1,218.4	405.5 678.7 1,066.2





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